Introduction

Determining the cause of liver disease in pregnancy can present a difficult challenge for clinicians. Minor elevations in aminotransferases may be a harbinger of life-threatening processes, such as acute fatty liver of pregnancy (AFLP) or hemolysis, elevated liver enzyme levels, low platelet count (HELLP) syndrome. Preeclampsia, HELLP syndrome, and AFLP form a spectrum of diseases that ranges from involving mild symptoms to severe life-threatening multiorgan system dysfunction. They have been shown to be the primary causes of severe hepatic dysfunction during pregnancy ***(Steingrub, 2004).***

Abnormal liver function tests occur in 3 - 5% of pregnancies for different reasons. Apart from pre-existing liver diseases liver diseases occurring during pregnancy, such as gall stones or viral hepatitis, most liver dysfunctions in pregnancy are caused by one of the five pregnancy-related liver diseases. The five known pregnancy-related liver diseases can be classified in two main categories depending on their association with or without preeclampsia. The preeclampsia-associated liver diseases are the preeclampsia itself, the HELLP-syndrome ("Hemolysis" (H), "Elevated Liver Tests" (EL), "Low Platelet Count" (LP)) and the acute fatty liver of pregnancy. Hyperemesis gravidarum and intrahepatic cholestasis of pregnancy are not associated with preeclampsia.

Hyperemesis gravidarum is characterised by intractable vomiting in the first trimester of pregnancy. 50% of patients with this condition have liver dysfunction. Intrahepatic cholestasis of pregnancy presents with pruritus and elevated bile acids

in the second half of pregnancy. Patients have often mild jaundice and highly elevated liver enzymes.

Treatment of choice is ursodeoxycholic acid to relieve the mother's symptoms. With this condition mainly the fetus is at risk. Severe preeclampsia is the most common cause of liver dysfunction in pregnancy, and is in some cases further complicated by HELLP syndrome. The prompt delivery of the baby is the only definitive therapy.

However, many life-threatening maternal complications like liver hematoma or rupture and abruptio placentae can occur. Acute fatty liver of pregnancy is also a severe illness occuring mostly in the third trimester; microvesicular fat deposition in the liver can cause liver failure with coagulopathy and encephalopathy. Only the immediate delivery of the fetus can save mother and child ***(Panther, 2008).***

Although managing such patients may be very challenging, spontaneous resolution of the disease occurs shortly after termination of the pregnancy, usually without hepatic sequellae. Early diagnosis and timely treatment is a key to therapeutic success ***(Hepburn, 2008).***